

IN THE CLAIMS:

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-9. (Cancelled)

¹ 10. (Currently Amended): A method of treating arthritis ~~an autoimmune disorder~~ in a subject comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to interleukin-22 (IL-22) in an amount sufficient to treat the arthritis ~~autoimmune disorder~~ in the subject.

11. (Cancelled)

² 12. (Currently Amended): The method of claim ¹10, wherein said arthritis ~~autoimmune disorder~~ is selected from the group consisting of rheumatoid arthritis, osteoarthritis, ~~multiple sclerosis, myasthenia gravis, Crohn's disease, inflammatory bowel disease, lupus-associated arthritis and psoriatic arthritis, diabetes and psoriasis.~~

¹ 12 13. (Currently Amended): The method of claim ¹10, wherein said arthritis ~~autoimmune disorder~~ is rheumatoid arthritis.

^{5 1 2 12} 13 14. (Currently Amended): The method of any of claim 10, 12, or 13, wherein said antibody is a neutralizing anti-IL-22 antibody or an antigen-binding fragment thereof.

15. (Cancelled)

¹³ 14 16. (Original): The method of claim ¹³14, wherein said subject is a human.

²⁰ 17. (Previously Presented): A method of ameliorating symptoms associated with arthritis, comprising administering to a subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to ameliorate the symptoms in the subject.

²⁰
21 ~~16~~. (Currently Amended): The method of claim ~~17~~, wherein said arthritis is selected from the group consisting of rheumatoid arthritis, osteoarthritis, lupus-associated arthritis and psoriatic arthritis.

²⁰
22 ~~16~~. (Currently Amended): The method of claim ~~17~~, wherein said IL-22 antibody, or antigen-binding fragment thereof, is administered therapeutically.

²⁰
23 ~~20~~. (Currently Amended): The method of claim ~~17~~, wherein said IL-22 antibody, or antigen-binding fragment thereof, is administered prophylactically.

21-33 (Cancelled)

²
3 34. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

²
4 ~~36~~. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

²
5 ~~36~~. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

²
7 ~~37~~. (Previously Presented): The method of claim ~~12~~, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

²
8 ~~38~~. (Previously Presented): The method of claim ~~12~~, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

^{5 20 21 22 23}
24 ~~39~~. (Currently Amended): The method of any of claims ~~17~~, ~~18~~, ~~19~~, or ~~20~~, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

²
9 ~~40~~. (Previously Presented): The method of claim ~~12~~, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

⁹
10 ~~41~~. (Previously Presented): The method of claim ~~40~~, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

²
11 ~~42~~. (Previously Presented): The method of claim ~~12~~, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

⁴¹
41 ~~43~~. (Currently Amended): A method of treating rheumatoid arthritis in a subject, comprising administering to the subject an antibody or antigen-binding fragment thereof that binds to IL-22 in an amount sufficient to treat the rheumatoid arthritis autoimmune disorder in the subject, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

⁴¹
42 ~~44~~. (Previously Presented): The method of claim ~~43~~, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2 and is capable of inducing the phosphorylation of a Stat-3 protein.

⁴¹
43 ~~45~~. (Previously Presented): The method of claim ~~43~~, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

²⁰
27 ~~46~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises an amino acid sequence that is at least 90% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

²⁰
28 ~~47~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises an amino acid sequence that is at least 95% identical to amino acids 34-179 of SEQ ID NO:2, wherein said IL-22 is capable of inducing the phosphorylation of a Stat-3 protein.

²⁰
29 ~~48~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises the amino acid sequence of amino acids 34-179 of SEQ ID NO:2.

²⁰
31 ~~49~~. (Previously Presented): The method of claim ~~17~~, wherein said IL-22 comprises the amino acid sequence of SEQ ID NO:2.

²⁰
32 ~~50~~. (Previously Presented): The method of claim ~~17~~, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid

sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

²⁰
33 ~~51~~. (Previously Presented): The method of claim ~~17~~, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

³³
34 ~~52~~. (Previously Presented): The method of claim ~~51~~, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

²⁰
35 ~~53~~. (Previously Presented): The method of claim ~~17~~, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

²⁰
36 ~~54~~. (Previously Presented): The method of claim ~~17~~, wherein said arthritis is psoriatic arthritis.

⁴¹
45 ~~55~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, binds to a fragment of IL-22 comprising an amino acid sequence selected from the group consisting of amino acids 50-60, 63-81, 84-93, and 168-177 of SEQ ID NO:2.

⁴¹
46 ~~56~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a single-chain antibody, a CDR-grafted antibody and a humanized antibody.

⁴⁶
47 ~~57~~. (Previously Presented): The method of claim ~~56~~, wherein said antibody, or antigen-binding fragment thereof, is a monoclonal antibody.

⁴¹
48 ~~58~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, is a human antibody.

⁴¹
49 ~~59~~. (Previously Presented): The method of claim ~~43~~, wherein said antibody, or antigen-binding fragment thereof, is a neutralizing antibody.

¹³
15 ~~60~~. (Previously Presented): The method of claim ~~14~~, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED₅₀ of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

²⁴
25 ~~61~~. (Previously Presented): The method of claim ~~39~~, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED₅₀ of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

⁴⁹
50 ~~62~~. (Previously Presented): The method of claim ~~59~~, wherein said antibody, or antigen-binding fragment thereof, neutralizes IL-22 binding with an ED₅₀ of about 5nM detected by an enzyme-linked immunoabsorbant assay (ELISA).

Please add new claims 63-76:

¹
16 ~~63~~. (New): The method of claim ~~10~~, wherein said arthritis is psoriatic arthritis.

¹
17 ~~64~~. (New): The method of claim ~~10~~, wherein said arthritis is osteoarthritis.

¹
18 ~~65~~. (New): The method of claim ~~10~~, wherein said arthritis is associated with lupus.

¹
19 ~~66~~. (New): The method of claim ~~10~~, wherein said antibody or antigen-binding fragment thereof is administered subcutaneously or intravenously.

²⁰
37 ~~67~~. (New): The method of claim ~~17~~, wherein said arthritis is rheumatoid arthritis.

²⁰
38 ~~68~~. (New): The method of claim ~~17~~, wherein said arthritis is osteoarthritis.

²⁰
39 ~~69~~. (New): The method of claim ~~17~~, wherein said arthritis is associated with lupus.

²⁰
40 ~~70~~. (New): The method of claim ~~17~~, wherein said antibody or antigen-binding fragment thereof is administered subcutaneously or intravenously.

²⁴
26 ~~71~~. (New): The method of claim ~~39~~, wherein said subject is a human.

⁴¹
52 ~~72~~. (New): The method of claim ~~43~~, wherein said antibody or antigen-binding fragment thereof is administered subcutaneously or intravenously.

⁴⁹
51 ~~73~~. (New): The method of claim ~~59~~, wherein said subject is a human.

⁵
6 ~~74~~. (New): The method of claim ~~36~~, wherein the subject is a human.

⁴³
44 ~~75~~. (New): The method of claim ~~45~~, wherein the subject is a human.

²⁹
30 ~~76~~. (New): The method of claim ~~46~~, wherein the subject is a human.